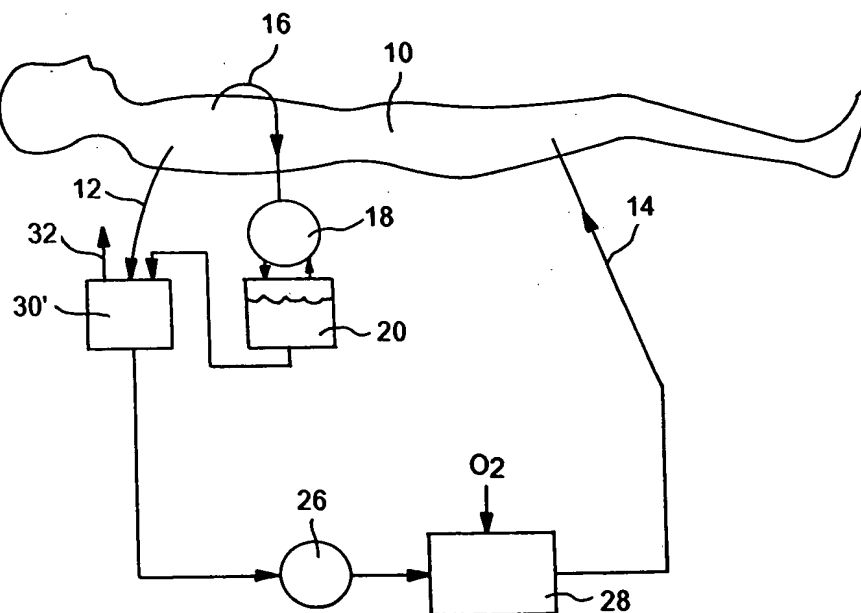
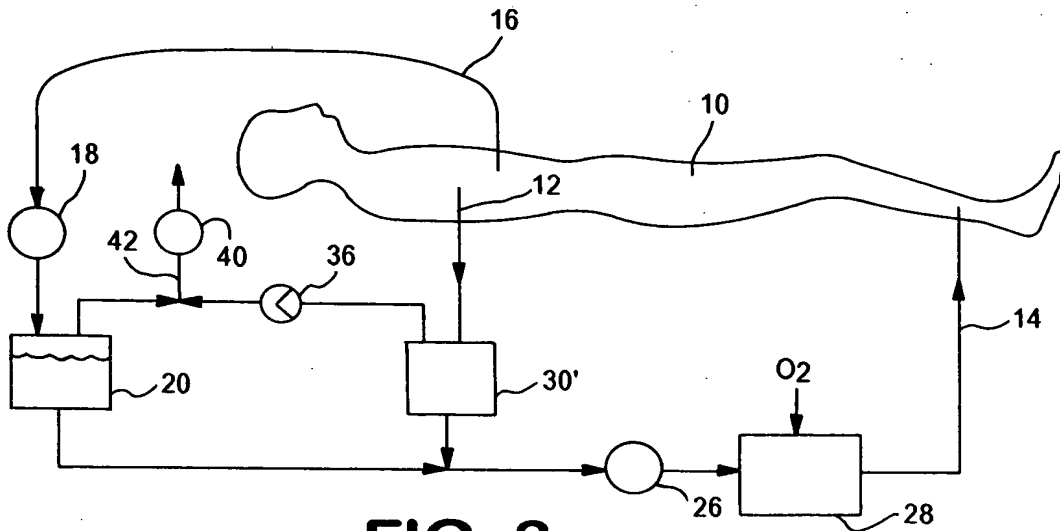


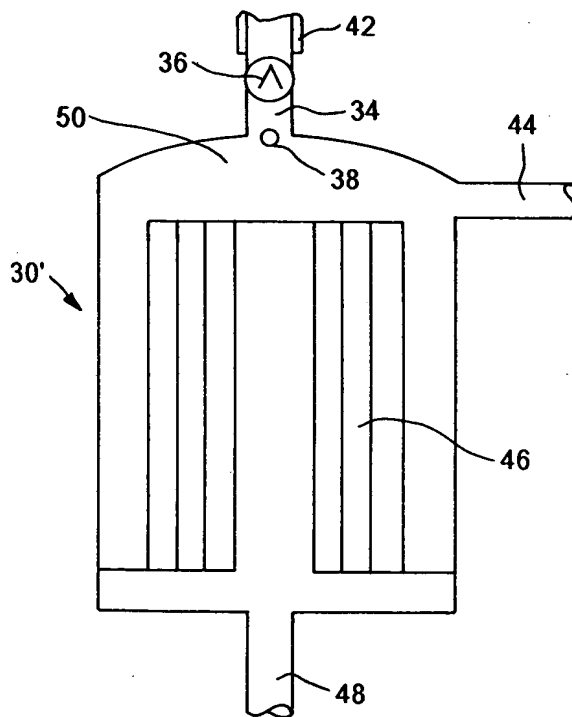
**FIG. 1**  
 PRIOR ART



**FIG. 2**  
 PRIOR ART



**FIG. 3**  
PRIOR ART



**FIG. 4**  
PRIOR ART

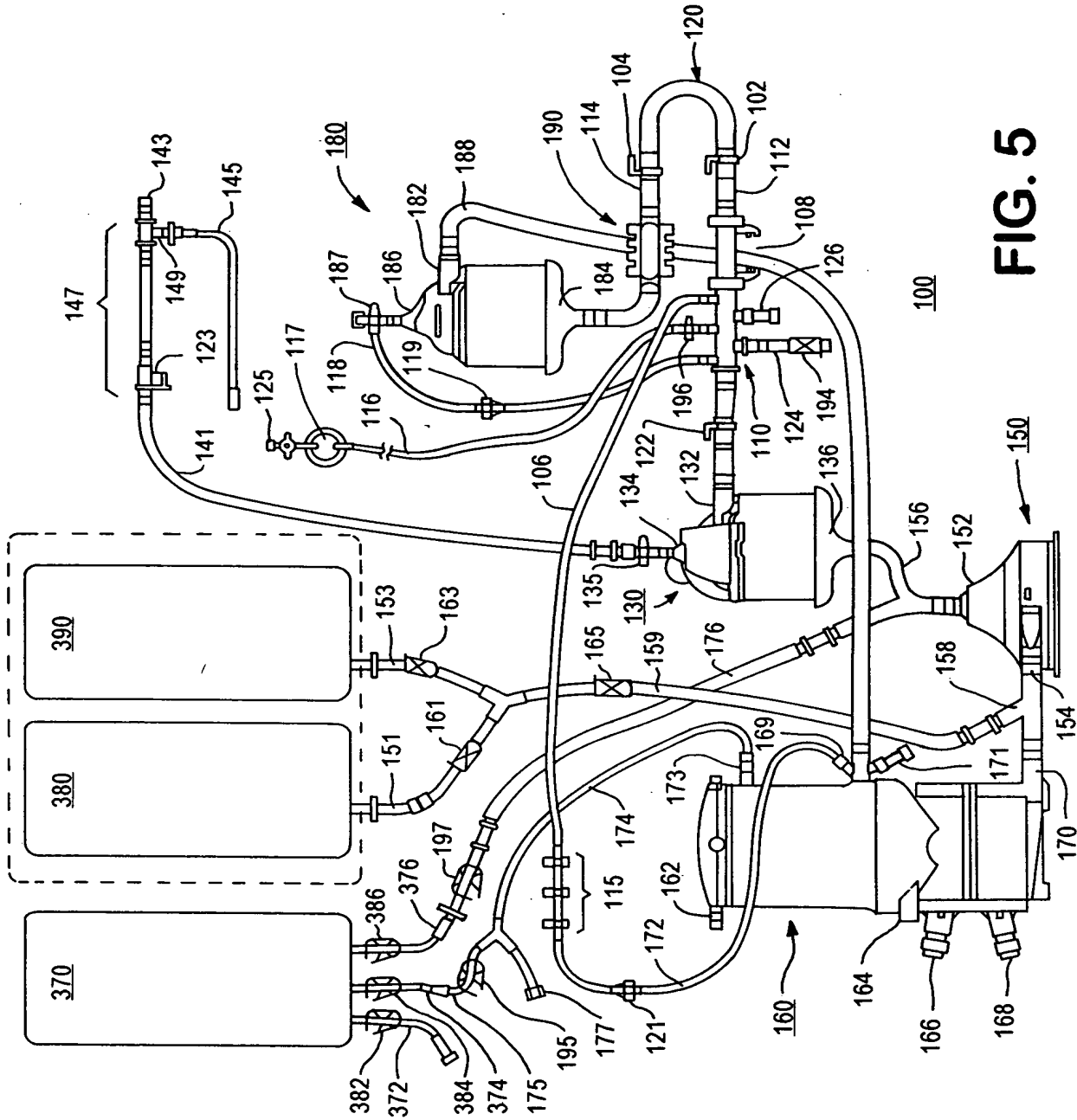
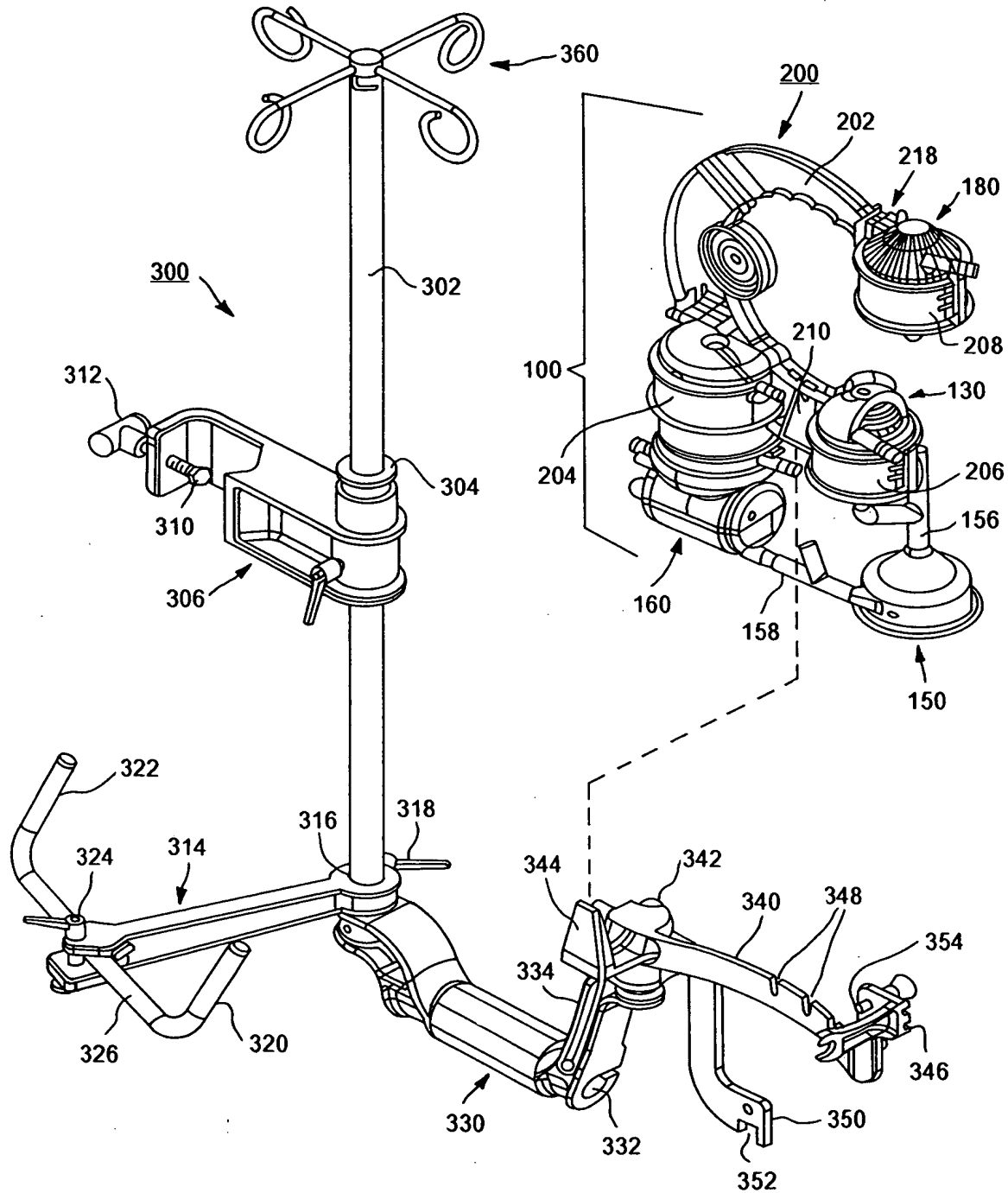
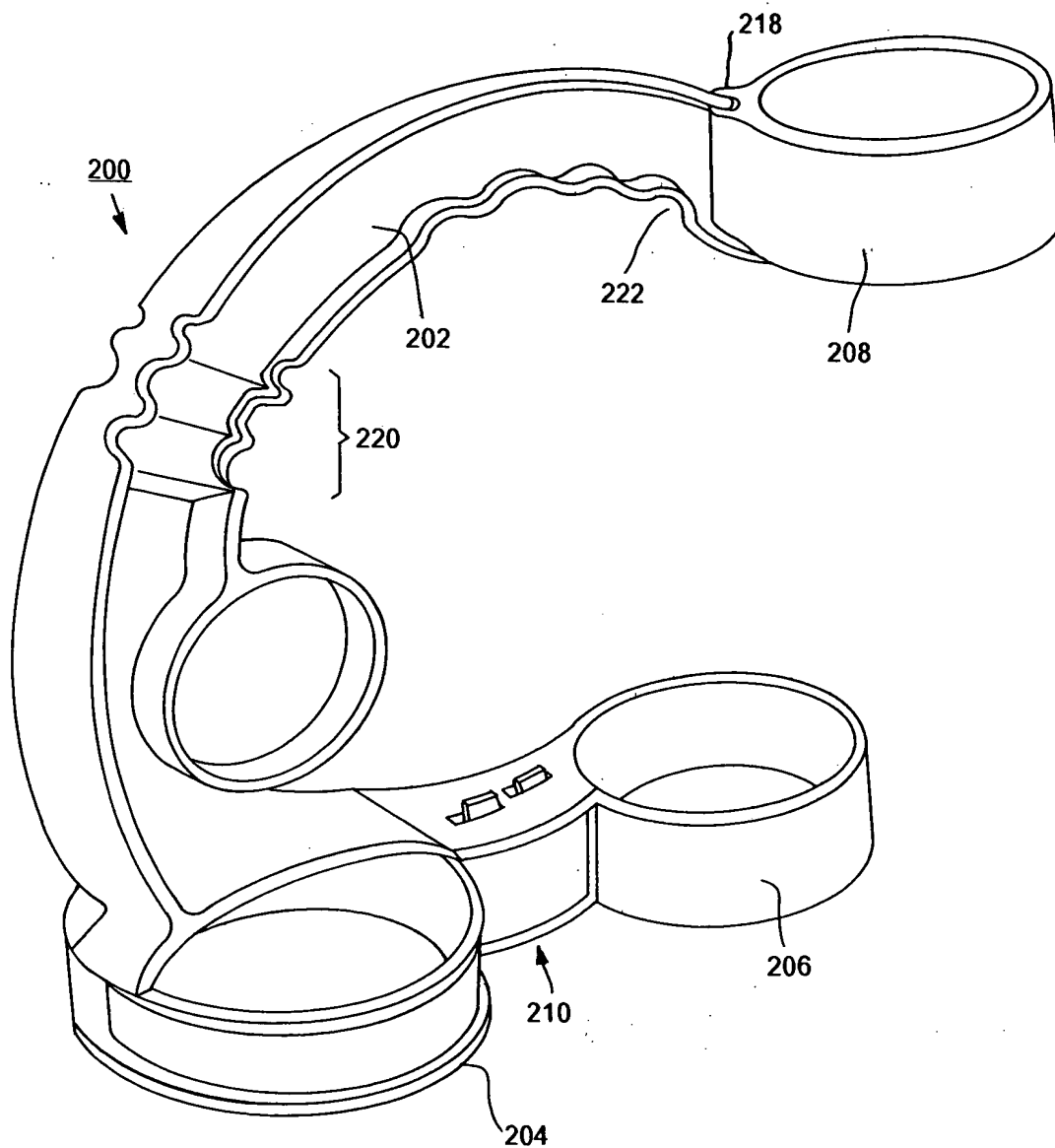


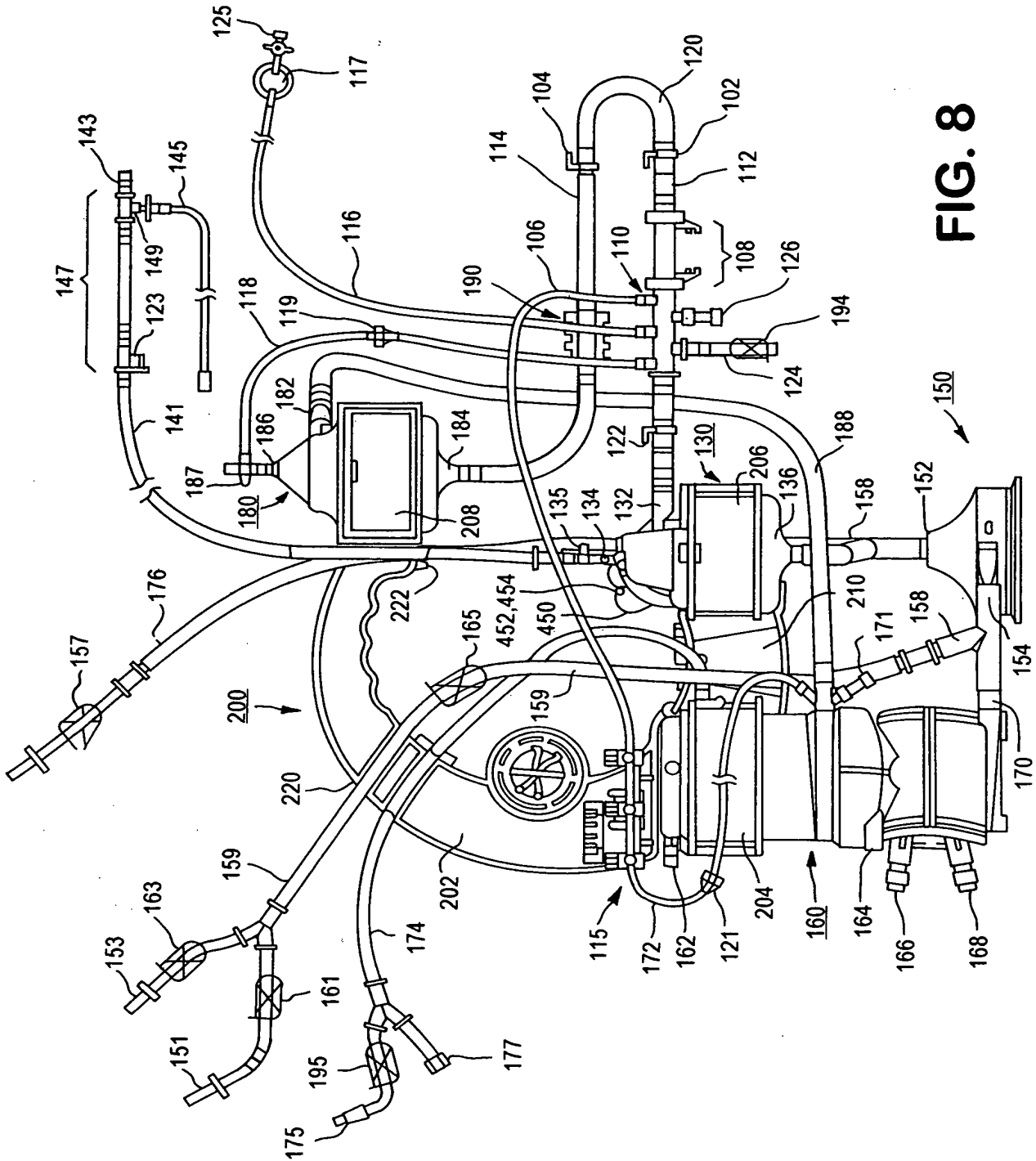
FIG. 5



**FIG. 6**



**FIG. 7**



**FIG. 8**

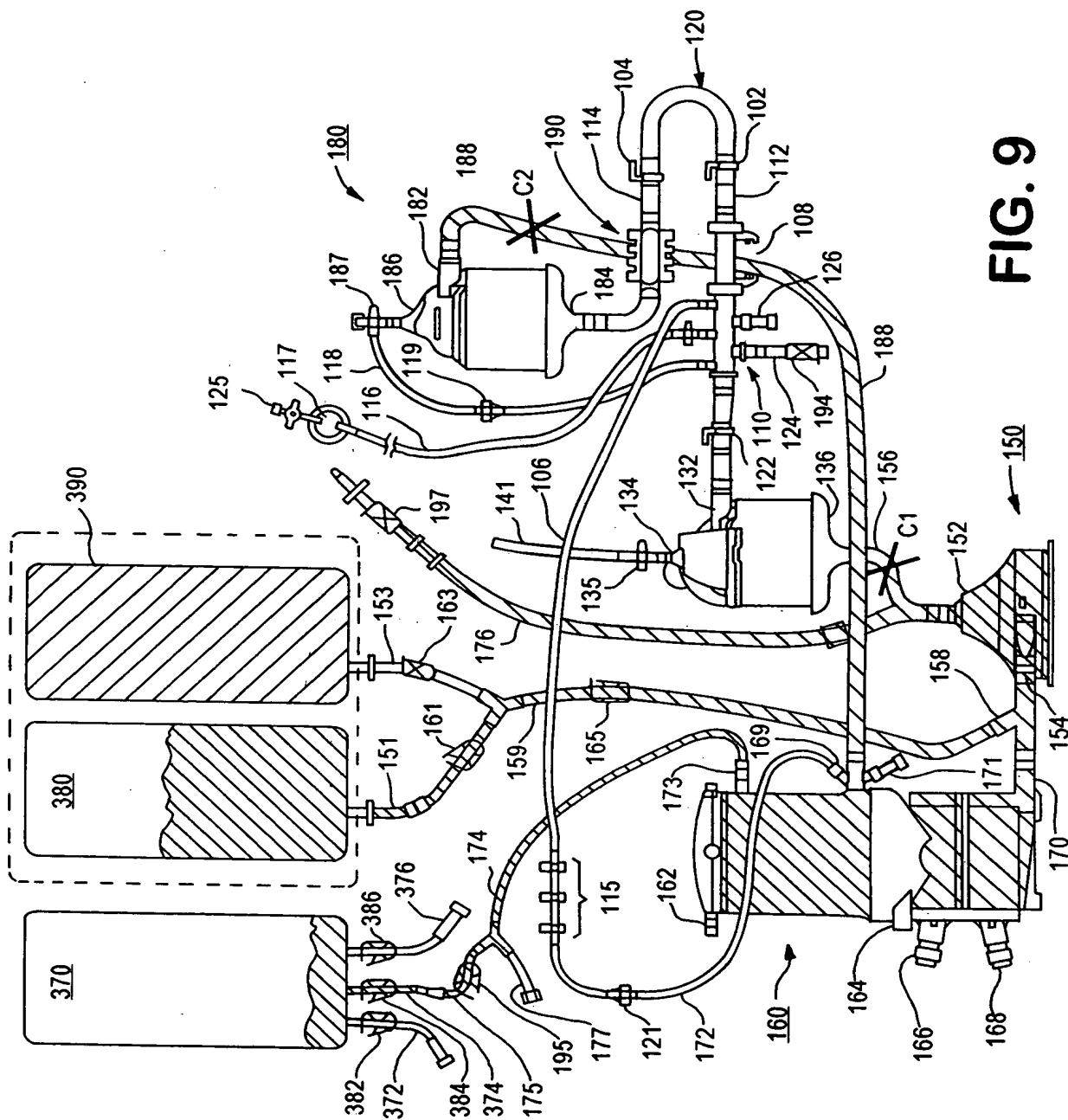


FIG. 9

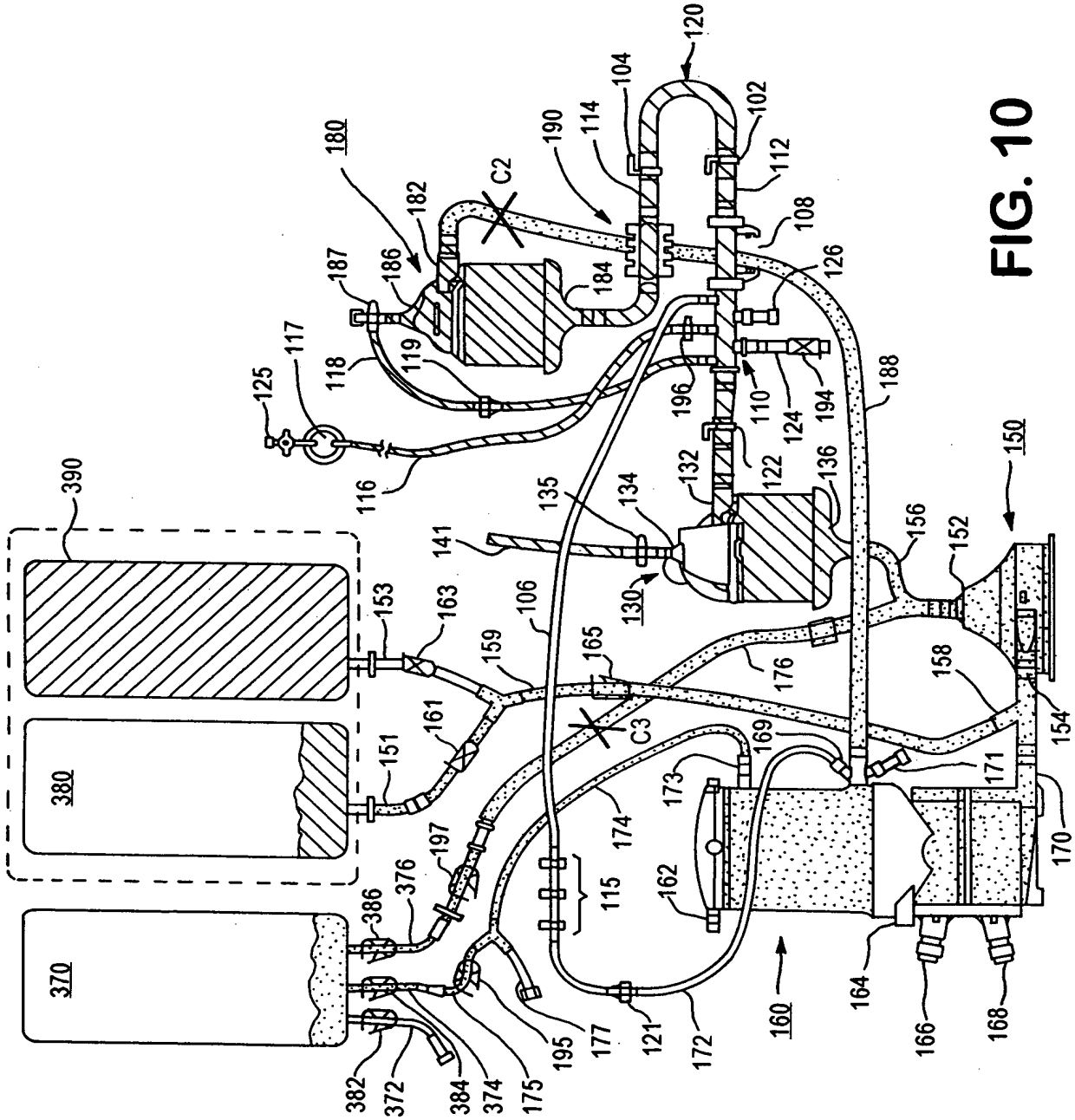


FIG. 10



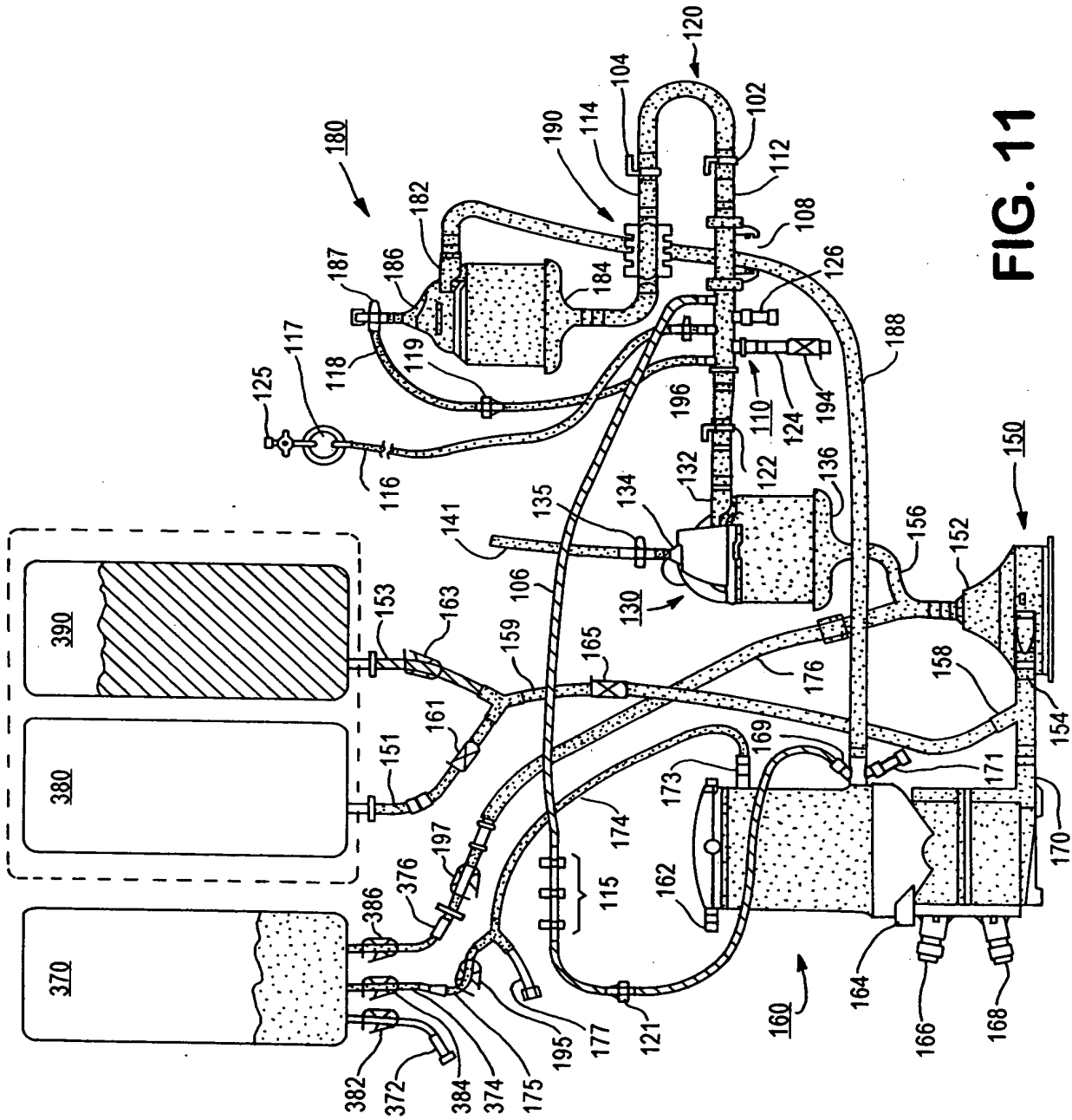


FIG. 11

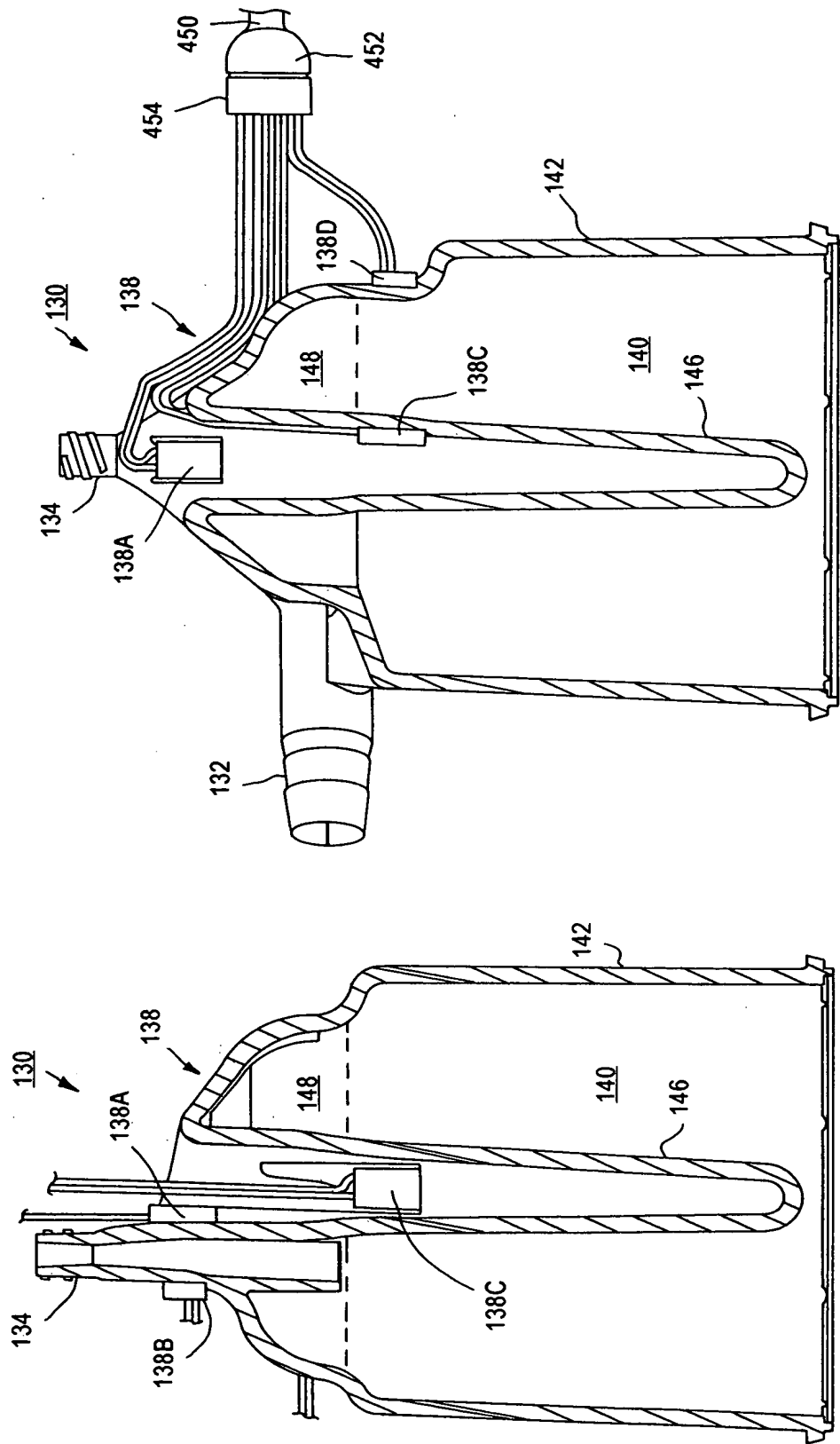
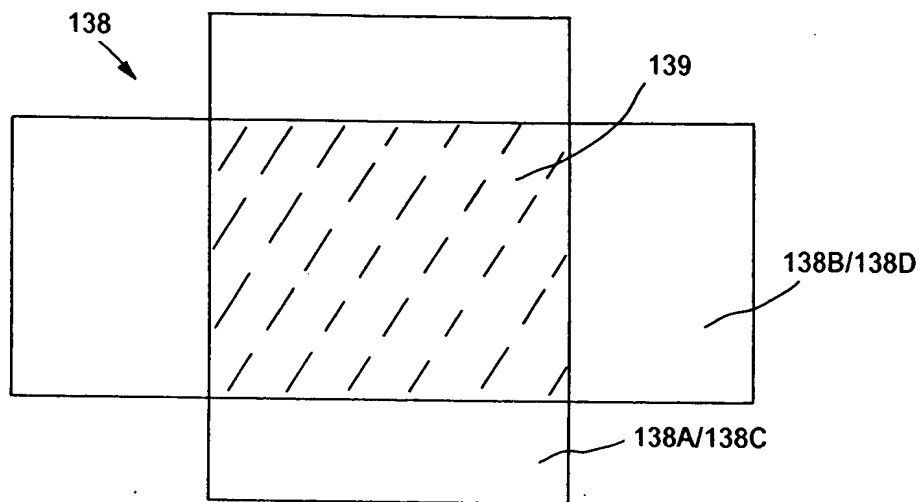
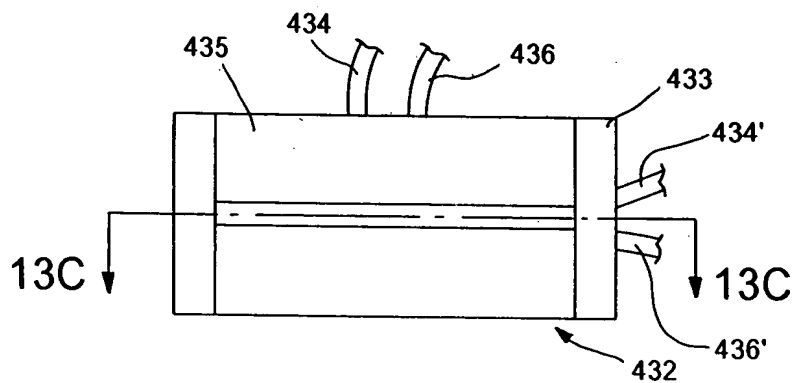


FIG. 12B

FIG. 12A

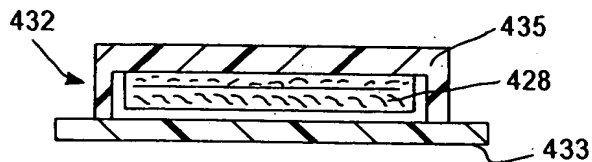


**FIG. 13A**



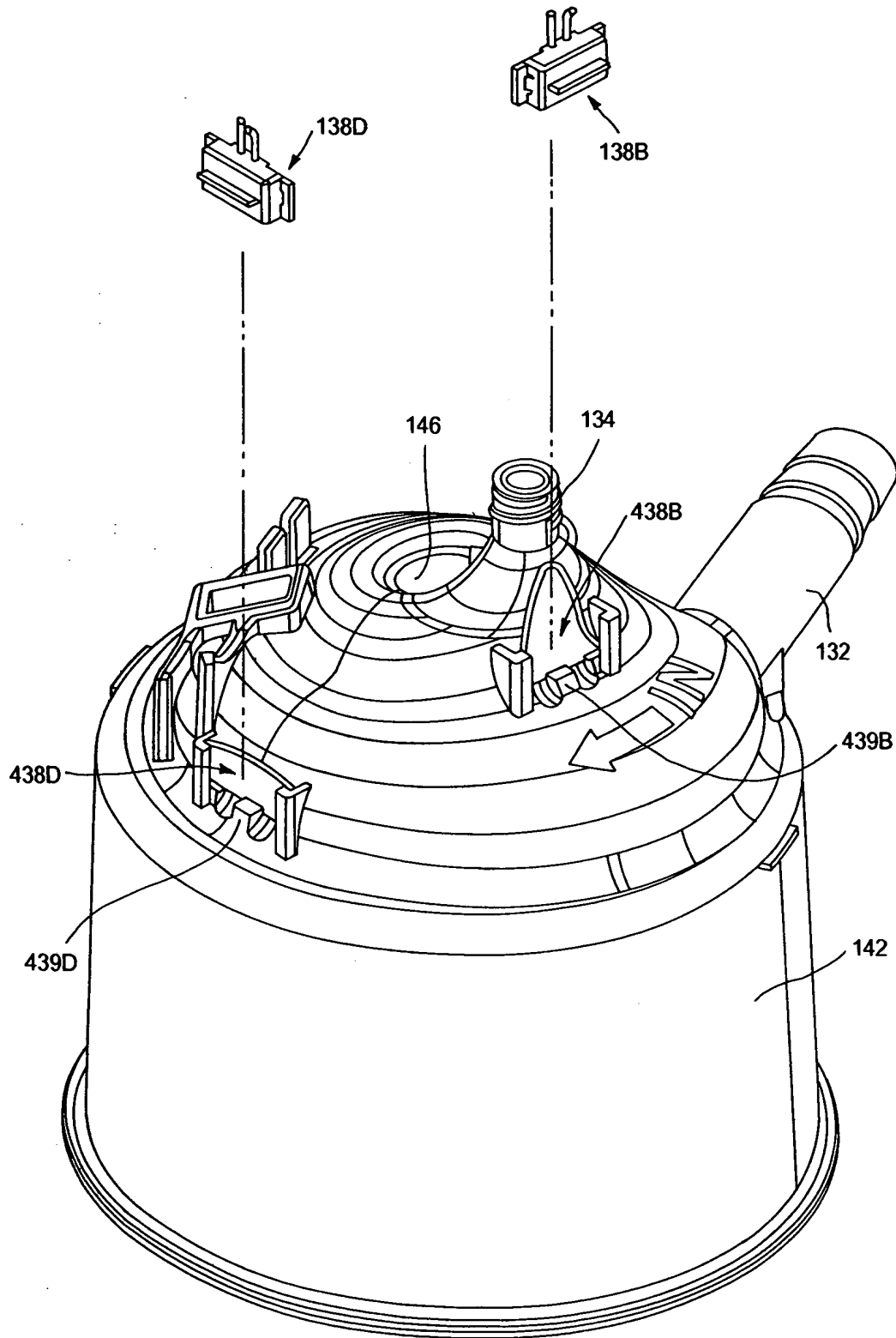
138A, 138B, 138C, 138D

**FIG. 13B**

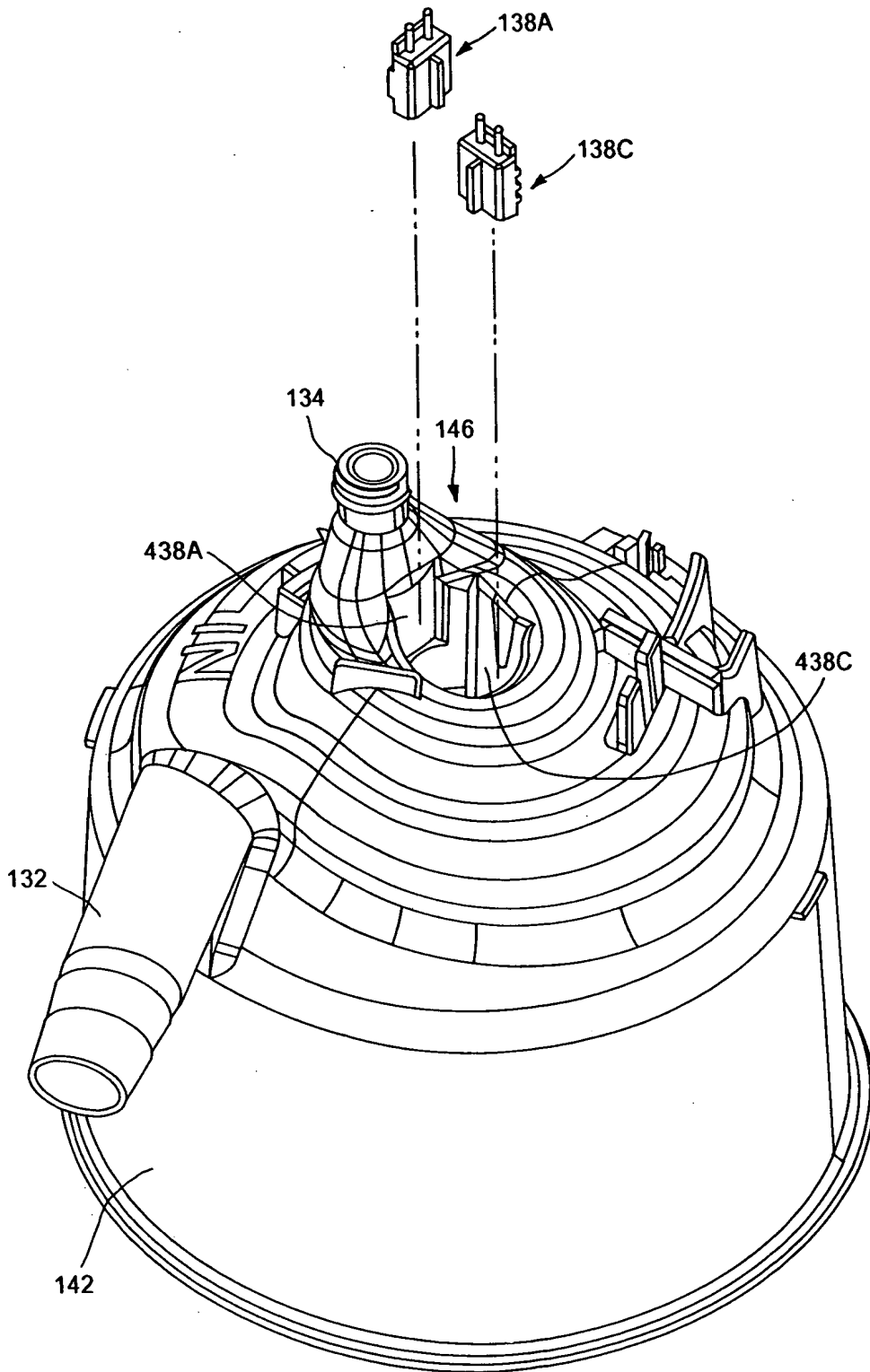


138A, 138B, 138C, 138D

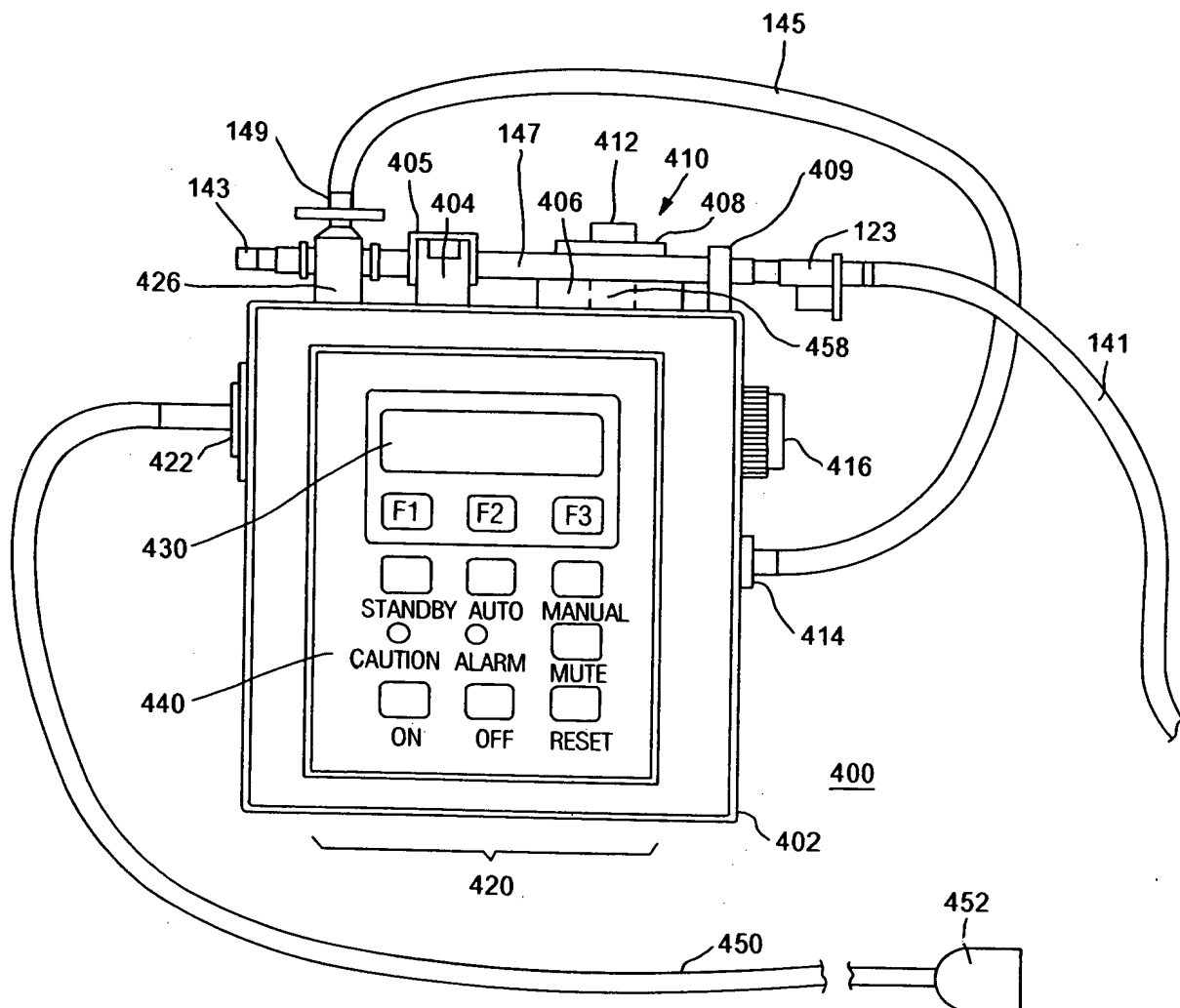
**FIG. 13C**



**FIG. 13D**



**FIG. 13E**



**FIG. 14**

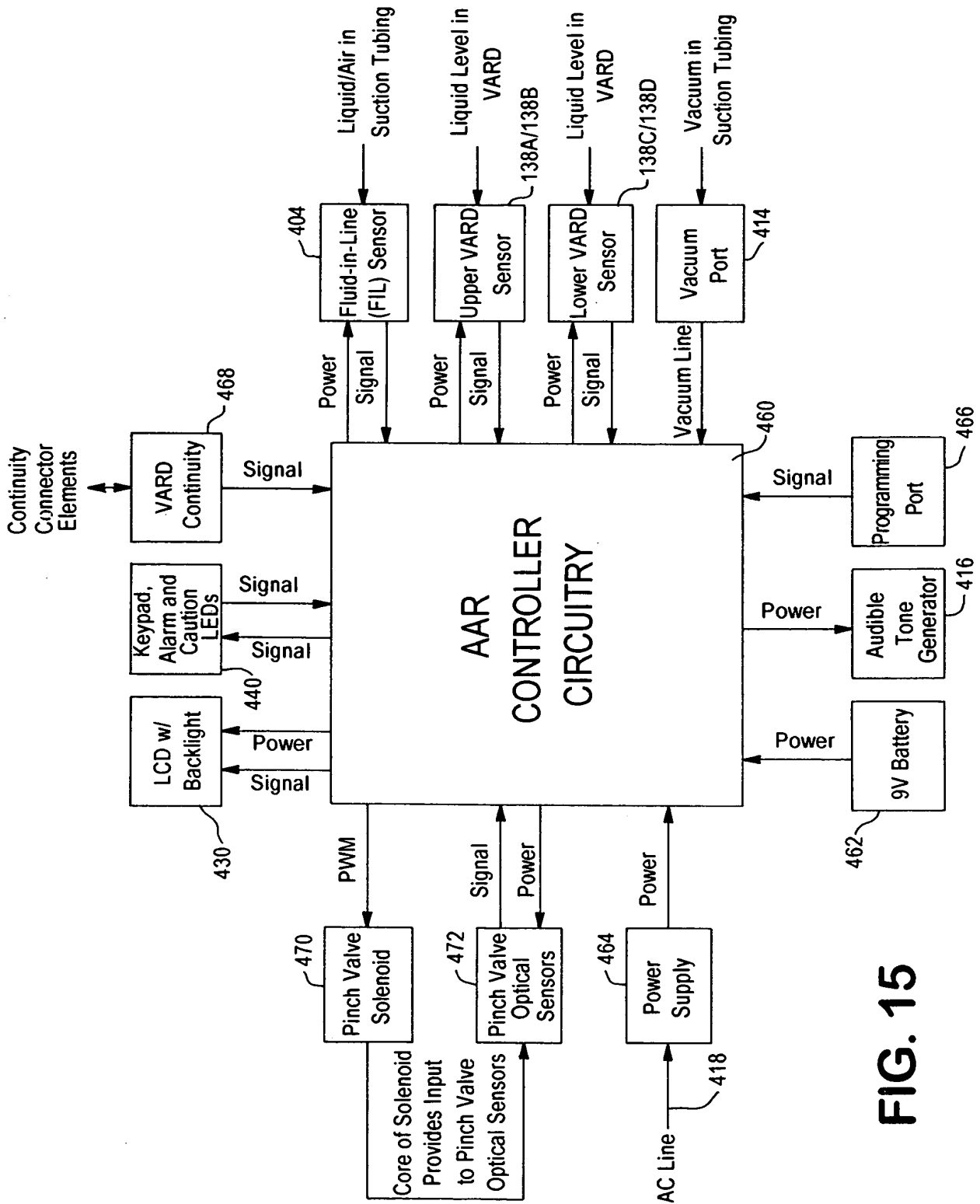


FIG. 15

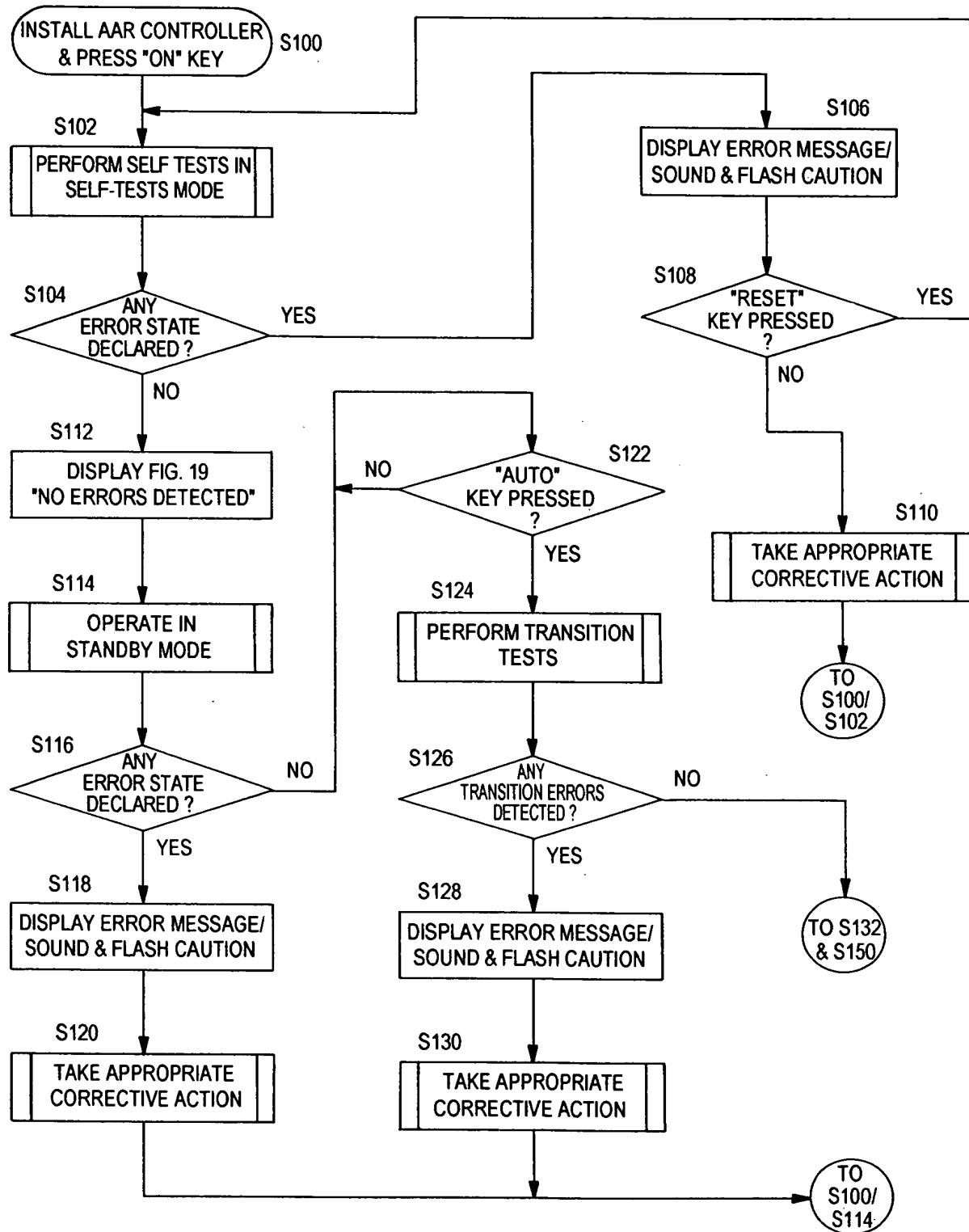


FIG. 16A



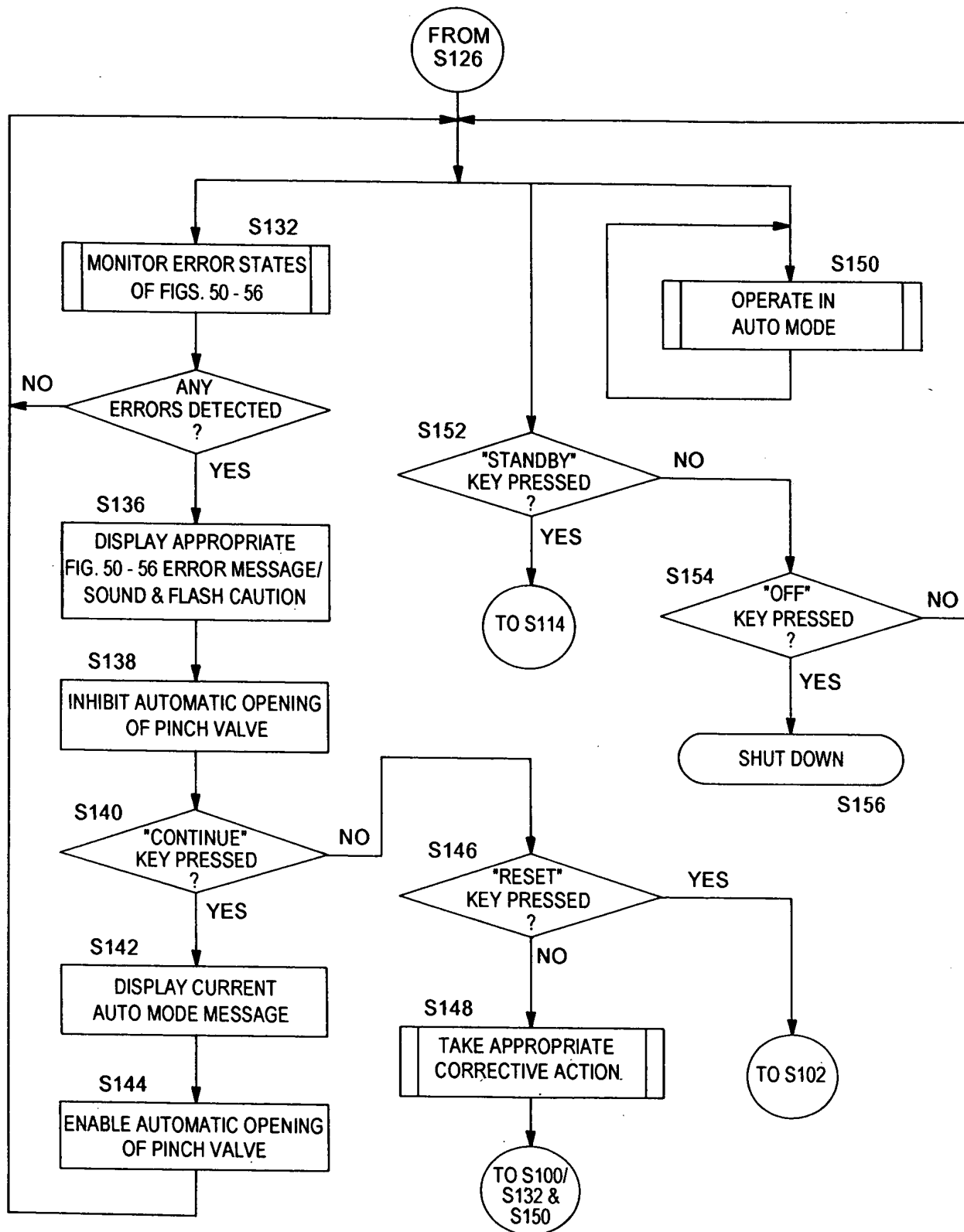


FIG. 16B

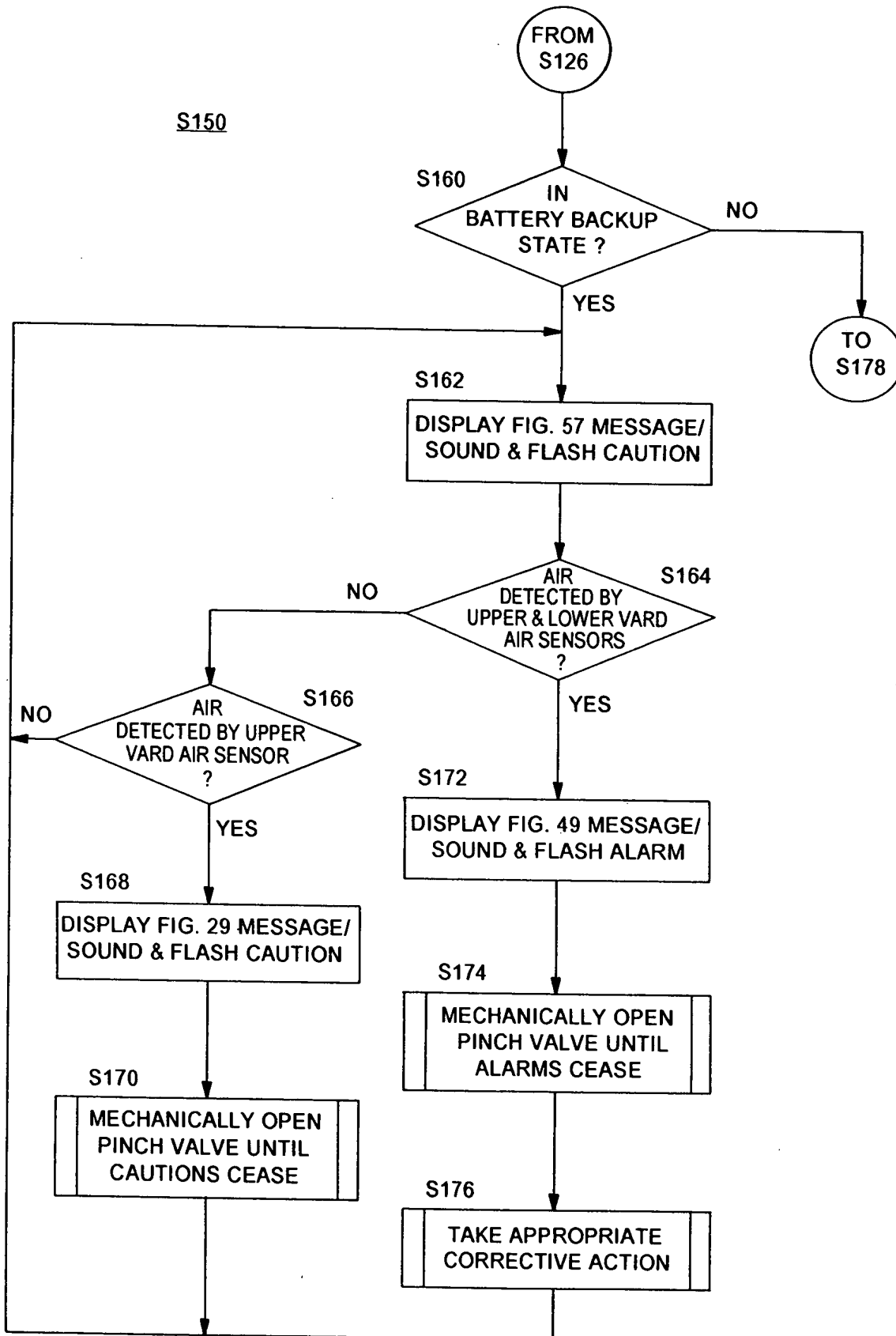
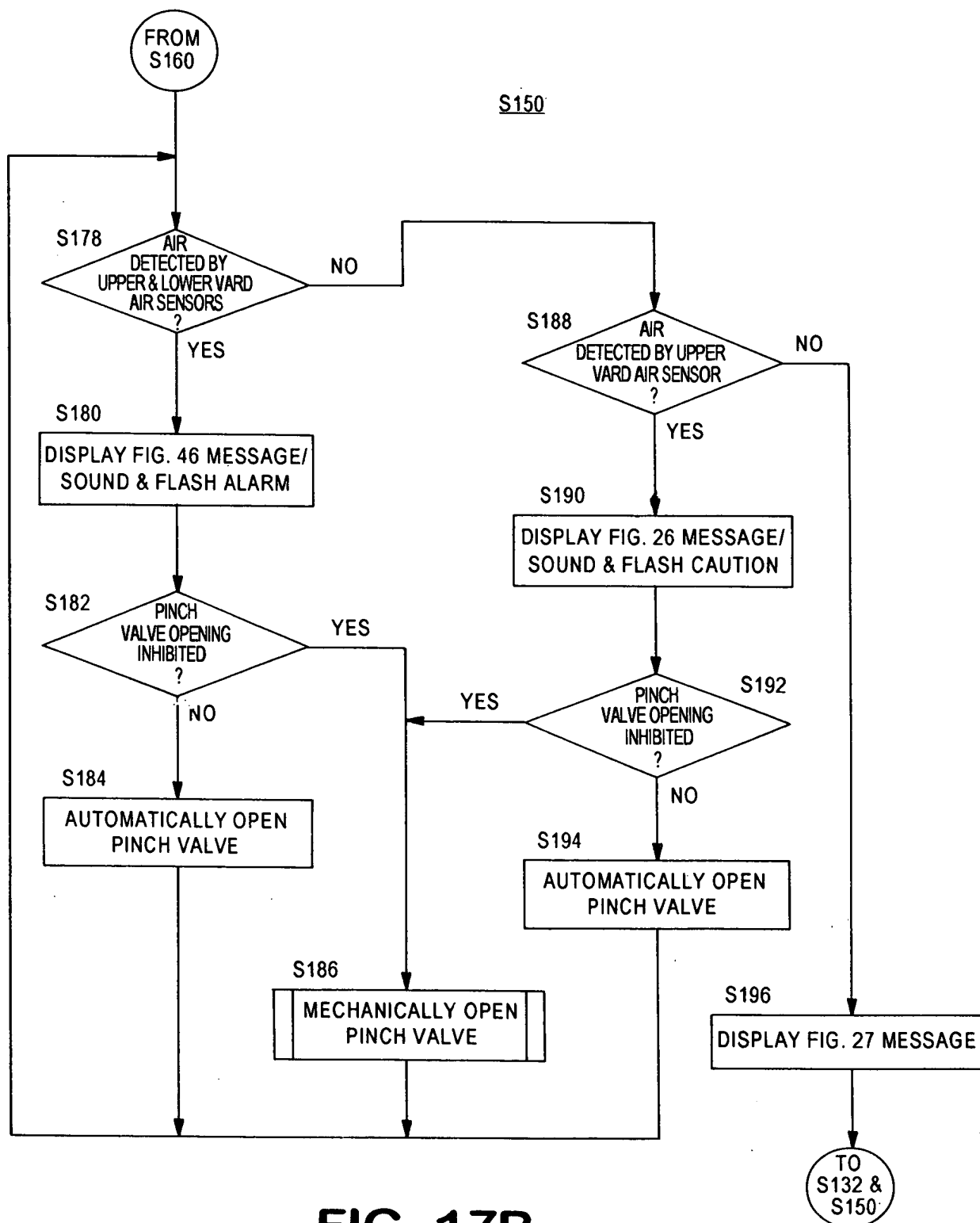


FIG. 17A



FIRMWARE VERSION X.XX  
PERFORMING SELF TEST

**FIG. 18**

SELECT LANGUAGE  
ENGLISH  
< > SELECT

**FIG. 22**

SELF TEST COMPLETE  
NO ERRORS DETECTED

**FIG. 19**

FLUID SENSOR TEST  
SENSOR STATUS  
AIR  
RETURN

**FIG. 23**

VALVE CLOSED  
STANDBY MODE  
SYSTEM READY  
MENU

**FIG. 20**

FLUID SENSOR TEST  
SENSOR STATUS  
FLUID  
RETURN

**FIG. 24**

LANG SENSOR RETURN

**FIG. 21**

VALVE OPEN  
STANDBY MODE  
SYSTEM READY  
MENU

**FIG. 25**

VALVE OPEN  
STANDBY MODE  
BATTERY BACKUP ON  
MENU

**FIG. 26**

SELF TEST COMPLETE  
CRC FAILURE  
REPLACE AAR CONTROLLER

**FIG. 30**

VALVE CLOSED  
AUTOMATIC MODE

**FIG. 27**

SELF TEST COMPLETE  
VALVE STUCK OPEN  
REPLACE AAR CONTROLLER

**FIG. 31**

VALVE OPEN  
AUTOMATIC MODE  
AIR IN VARD

**FIG. 28**

SELF TEST COMPLETE  
VALVE STUCK CLOSED  
REPLACE AAR CONTROLLER

**FIG. 32**

MANUAL OPERATION  
OPEN THE VALVE

**FIG. 29**

SELF TEST COMPLETE  
AAR CONTROLLER FAILURE  
REPLACE AAR CONTROLLER

**FIG. 33**

SELF TEST COMPLETE  
LOW BATTERY

CONTINUE ?

**FIG. 34**

VALVE CLOSED  
STANDBY MODE  
AIR IN VARD

MENU

**FIG. 38**

SELF TEST COMPLETE  
NO BATTERY BACKUP

CONTINUE ?

**FIG. 35**

VALVE CLOSED  
STANDBY MODE  
LOW SUCTION

MENU

**FIG. 39**

SELF TEST COMPLETE  
BATTERY BACKUP ON

CONTINUE ?

**FIG. 36**

VALVE CLOSED  
STANDBY MODE  
BATTERY BACKUP ON

MENU

**FIG. 40**

VALVE CLOSED  
STANDBY MODE  
VARD NOT CONNECTED

MENU

**FIG. 37**

VALVE CLOSED  
STANDBY MODE  
LOW BATTERY

MENU

**FIG. 41**

VALVE CLOSED  
STANDBY MODE  
NO BATTERY BACKUP  
MENU

**FIG. 42**

AAR CONTROLLER FAILURE  
REPLACE AAR CONTROLLER

**FIG. 46**

VARD NOT CONNECTED  
CONTINUE ?

**FIG. 43**

LOW SUCTION  
CONTINUE ?

**FIG. 47**

CHECK VALVE TUBING  
CONTINUE ?

**FIG. 44**

VALVE OPEN  
TOO MUCH AIR  
ENTERING VARD

**FIG. 48**

CHECK VARD SENSORS  
CONTINUE ?

**FIG. 45**

MANUAL OPERATION  
OPEN THE VALVE

**FIG. 49**

AUTOMATIC MODE  
VALVE STUCK OPEN

CONTINUE ?

**FIG. 50**

AUTOMATIC MODE  
VARD SENSOR FAILURE

CONTINUE ?

**FIG. 54**

AUTOMATIC MODE  
VALVE FAILURE

CONTINUE ?

**FIG. 51**

VALVE CLOSED  
AUTOMATIC MODE  
LOW SUCTION

**FIG. 55**

AUTOMATIC MODE  
VALVE STUCK CLOSED

CONTINUE ?

**FIG. 52**

AUTOMATIC MODE  
VARD NOT CONNECTED

CONTINUE ?

**FIG. 56**

SYSTEM FAILURE  
BLOOD BEING REMOVED

CONTINUE ?

**FIG. 53**

AUTOMATIC MODE  
BATTERY BACKUP ON

**FIG. 57**